

Claims

1. A vehicle air braking system including an air compressor, an air dryer, an air dryer control valve having a vent to atmosphere, a reservoir adapted to contain a quantity of dry air for use in regenerating desiccant of the air dryer and means to exhaust dry air through the desiccant and control valve to atmosphere, the system further including control means sensitive to the operating condition of the vehicle and operable to cause regeneration of the desiccant and purging of the control valve when the vehicle engine is stopped.
2. A system according to claim 1 wherein said control means are operable to opens aid vent of the control valve.
3. A system according to claim 2 wherein said control means are operable to close said vent after regeneration.
4. A system according to claim 2 or claim 3 wherein said control valve is a valve operated by a solenoid.
5. A system according to any preceding claim wherein said control means is responsive to a state of the vehicle ignition system.
6. A system according to any preceding claim wherein the control valve is switchable between an inlet position, where air received at an inlet thereof passes to the reservoir via the desiccant, and an exhaust position where air in the reservoir is permitted to flow through the desiccant and control valve vent to atmosphere.
7. A system as claimed in any preceding claim wherein the control valve and vent are provided in a common housing of the air dryer.
8. A system as claimed in any preceding claim wherein the control valve is intermediate a desiccant chamber of the air dryer and the vent.
9. A system as claimed in any preceding claim wherein the reservoir surrounds the air dryer.
10. A method of regenerating an air dryer of a vehicle air braking system and purging a control valve of the air dryer at the end of the working day, the method comprising the steps of:
 - determining that the vehicle engine is stopped;
 - connecting a regeneration reservoir of dry air to the air dryer;
 - connecting the air dryer and control valve to atmosphere; and
 - backflushing the air dryer and control valve to remove moisture therefrom.